```
Query:  369   LGSGAFGCVYK---VRKHSGQNLLAMKEVNLHNPAFGKDKKDRDSSVRNIVSELTIIKEQ  425
Sbjct:  7     LGEGAFGEVYKGTLKGKGGKEVEVAVKT--LKEDASEQQIEE-------FLREAKIMR-K  56

Query:  426   LYHPNIVRYYKTFLENDRLYIVMELIEGAPLGEHFSSLKEKHHHFTEERLWKIFIQLCLA  485
Sbjct:  57    LDHPNIVKLLGVCTEEEPLMIVMEYMEGGDLLDYLR--KNRPKELSLSDLLSFALQIARG  114

Query:  486   LRYLHKEKRIVHRDLTPNNIMLGDKDKVTVTDFGLAKQKQENSKLTSVVG--TILYSCPE  543
Sbjct:  115   MEYLE-SKNFVHRDLAARNCLVGENKTVKIADFGLSRDLYSDDYYKVKGGKLPIRWMAPE  173

Query:  544   VLKSEPYGEKADVWAVGCILYQMATL-SPPFYSTNMLSLATKIVEAVYEPVPEGIYSEKV  602
Sbjct:  174   SLKEGKFTSKSDVWSFGVLLWEIFTLGESPYPGMSNEEVLEYLKKGYRLPQPPNC-PDEI  232

Query:  603   TDTISRCLTPDAEARPDIVEVSSMI  627
Sbjct:  233   YDLMLQCWAEDPEDRPSFSELVERL  257
```

FIG. 1


```
Query:  363   YAILDHLGSGAFGCVYKVRKHSGQNLLAMKEVNLHNPAFGKDKKDRDSSVRNIVSELTII  422
Sbjct:  1     YELGEKLGSGSFGKVYKGKHKNTGEIVAIKKL----------KKESIKEKKRFLREIRIL  50

Query:  423   KEQLYHPNIVRYYKTFLENDRLYIVMELIEGAPLGEHFSSLKEKHHHFTEERLWKIFIQL  482
Sbjct:  51    R-RLSHPNIVRLIGVFEEDDHLYLVMEYMEGGDL---FDYLRRNGLLLSEKEAKKIALQI  106

Query:  483   CLALRYLHKEKRIVHRDLTPNNIMLGDKDKVTVTDFGLAKQ-KQENSKLTSVVGTILYSC  541
Sbjct:  107   LRGLEYLH-SRGIVHRDLKPENILLDENGTVKIADFGLARLLKSSYSKLTTFVGTPEYMA  165

Query:  542   PEVLKSEPYGEKADVWAVGCILYQMATLSPPFYSTNMLSLATKIVEAVYEPVPEGIYSEK  601
Sbjct:  166   PEVLEGRGYSSKVDVWSLGVVLYELLTGKPPFSGIDPLEELFRIIKRGLRLPLPPNCSEE  225

Query:  602   VTDTISRCLTPDAEARPDIVEV  623
Sbjct:  226   LKDLIKKCLNKDPEKRPTAKEI  247
```

FIG. 2

```
Query:  363   YAILDHLGSGAFGCVYKVRKHSGQNLLAMKEVNLHNPAFGKDKKDRDSSVRNIVSELTII  422
Sbjct:  1     YELLEVLGKGAFGKVYLARDKKTGKLVAIKVIKK--------EKLKKKKRERILREIKIL  52

Query:  423   KEQLYHPNIVRYYKTFLENDRLYIVMELIEGAPLGEHFSSLKEKHHHFTEERLWKIFIQL  482
Sbjct:  53    K-KLDHPNIVKLYDVFEDKDKLYLVMEYCEGGDLFDLL----KKRGRLSEDEARFYARQI  107

Query:  483   CLALRYLHKEKRIVHRDLTPNNIMLGDKDKVTVTDFGLAKQKQENS-KLTSVVGTILYSC  541
Sbjct:  108   LSALEYLHS-NGIIHRDLKPENILLDSDGHVKLADFGLAKQLDSGGTLLTTFVGTPEYMA  166

Query:  542   PEVLKSEPYGEKADVWAVGCILYQMATLSPPFYSTNMLSLATKIVEAVYEPVP--EGIYS  599
Sbjct:  167   PEVLLGKGYGKAVDIWSLGVILYELLTGKPPFPGDDQLDALFKKIGKPPPPFPPPEWKIS  226

Query:  600   EKVTDTISRCLTPDAEARPDIVEV  623
Sbjct:  227   PEAKDLIKKLLVKDPEKRLTAEEA  250
```

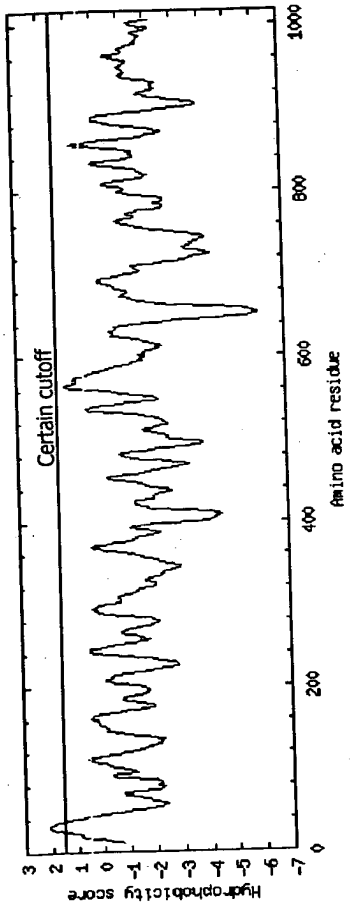
FIG. 3

```
Query:  369   LGSGAFGCVYKVRKHSGQNLLAMKEVNLHNPAFGKDKKDRDSSVRNIVSELTIIKEQLYH  428
Sbjct:  48    LDGSGNERAVKIYKTGTLEFKRRDRYVDGDFRFKYRKINP-----RKLVRLWAEKE---F  99

Query:  429   PNIVRYYKTFL------ENDRLYIVMELIEGAPLGEHFSSLKEKHHHFTEERLWKIFIQL  482
Sbjct:  100   RNLQRLYEAGVPVPKPIAWRRNVLVMEFIGG----DGLPAPRLKDVEPEEEEEDELYDDI  155

Query:  483   CLALRYLHKEKRIVHRDLTPNNIMLGDKDKVTVTDFGLAKQKQE  526
Sbjct:  156   LEEMRKLYKEGELVHGDLSEYNILVHD-GKVVIIDVSQSVELDH  198
```

FIG. 4



GES

GES		
Peak Range	Peak Type	Peak Height
25 - 37	Certain	2.126
112 - 112	Putative	0.535
242 - 242	Putative	0.515
562 - 577	Putative	1.205
855 - 858	Putative	0.886

FIG. 5